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Observations of Comet Barnard (1888, *September* 2) *made at the Radcliffe Observatory, Oxford*.

(*Communicated by E. J. Stone, F.R.S., Radcliffe Observer.*)

The following observations were made with the Barclay equatorial, using the ring-micrometer, with power 100.

1888.	G.M.T.	Local Sidereal Time.	Observer.	Comet—Star (Corrected for Refraction only.) R.A.	Comet—Star (Corrected for Refraction only.) N.P.D.	No. of Comparisons.	Apparent R.A. of Comet.	Parallax in R.A. p	Log	Apparent N.P.D. of Comet.	Parallax in N.P.D. q	Log $q\,\Delta$.	Reference to Comparison Star.
	h m s	h m s		m s	′ ″		h m s	s		° ′ ″	″		
Oct. 5	14 17 7	3 12 47	R.	+1 28·34	+3 21·36	7	6 34 16·04	0·142	9·4533	81 59 5·0	3·17	0·8029	(*a*)
Nov. 13	13 13 55	4 43 10	R.	−0 31·05	−5 7·83	12	4 17 9·42	0·036	8·6152	91 8 35·3	6·20	0·8459	(*b*)

Assumed Places of Comparison Stars.

Comp. Star.	Mean R.A. 1888·0.	Reduction to Apparent R.A.	Mean N.P.D. 1888·0.	Reduction to Apparent N.P.D.	Authority.
	h m s	s	° ′ ″	″	
(*a*)	6 32 46·13	+1·57	81 55 44·03	−0·42	Transit Circle Observation, 1888, December 12.
(*b*)	4 17 37·55	+2·92	91 13 49·30	−6·17	Mean of Göttingen, 1875, Nos. 1164 and 1165.

Mr. Robinson's Remarks.

October 5.—Circular Nebulosity, about 3½′ diameter. Distinct nucleus of the 10th magnitude.

In the computations of the parallax the adopted value of the Sun's mean horizontal parallax is 8″·85 and the geocentric distances, Δ, have been taken from the *Astronomische Nachrichten*, Nos. 2858, p. 32, and 2861, p. 80.

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At $13^{h}\ 29^{m}\ 10^{s}{\cdot}0$ G.M.T. of November 13, or Local Sidereal Time $4^{h}\ 58^{m}\ 27^{s}{\cdot}6$, a star of the 10th magnitude appeared to be occulted by the nucleus of the comet, which was estimated to be of the same brightness as the star. The R.A. and N.P.D. of the star obtained from three independent sets of comparisons with the star (*b*) on November 13, December 12, and December 22 are:—

		Correction for Reduction to Appar. R.A.		Correction for Reduction to Appar. N.P.D.
	h m s	s	° ′ ″	″
Epoch 1888·0	4 17 2·49	+2·92	91 8 49·9	−6·17

This would give the following places for the comet at the time of occultation:

Apparent R.A. of Comet.	Parallax in R.A. p	Apparent N.P.D. of Comet.	Parallax in N.P.D. q	Observer.
h m s	s	° ′ ″	″	
4 17 5·41	+0·06	91 8 43·7	−6·20	Mr. Robinson

The calculated motion between the observations with the ring-micrometer and the time of occultation, as given by the ephemeris, is $-4^{s}{\cdot}09$ in R.A. and $+13''{\cdot}10$ in N.P.D.

In the observations of Sawerthal's Comet, printed in the *Monthly Notices* for May, June, and November 1888, the logarithms of the parallaxes in R.A. and N.P.D. have been given under the headings log $p \times \Delta$, computed with an adopted value of the Sun's mean distance equal to $8''{\cdot}85$, and geocentric distances extracted from the ephemerides of the *Astronomische Nachrichten*, Nos. 2834, 2835, 2838, 2846. The symbol p does not therefore, in these results, denote the parallax in R.A. and N.P.D. respectively, but the factors which, when multiplied by Δ, give the required parallaxes.

Radcliffe Observatory, Oxford:
1888, *December* 14.

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Ephemeris for Physical Observations

Greenwich Noon.		Angle of Position of ♃'s Axis.	Latitude of Earth above ♃'s Equator.	Latitude of Sun above ♃'s Equator.	Annual Parallax.		Longitude of ♃'s Central Meridian. (877°·90)	Longitude of ♃'s Central Meridian. 870°·27)	Corr. for Phase.
					Λ−L.	L−O.	I.	II.	
1889.		°	°				°	°	°
Feb.	26	357·492	−2·245	−2·404	−9·777	138·269	240·18	237·43	+0·42
Mar.	3	357·147	2·228	2·391	10·116	139·012	309·31	268·41	·45
	8	356·827	2·211	2·377	10·401	139·702	18·51	299·45	·47
	13	356·534	2·195	2·363	10·630	140·336	87·77	330·56	·49
	18	356·268	2·180	2·349	10·800	140·910	157·10	1·74	·51
	23	356·031	2·166	2·335	10·907	141·422	226·50	32·98	·52
	28	355·825	2·153	2·321	10·948	141·869	295·96	64·29	·52
Apr.	2	355·652	−2·141	−2·307	−10·919	142·246	5·49	95·67	+0·52
	7	355·512	2·130	2·293	10·818	142·551	75·09	127·11	·51
	12	355·406	2·120	2·278	10·643	142·782	144·76	158·62	·49
	17	355·334	2·112	2·263	10·391	142·937	214·49	190·21	·47
	22	355·298	2·105	2·249	10·061	143·014	284·29	221·86	·44
	27	355·299	2·099	2·234	9·653	143·013	354·16	253·57	·41
May	2	355·335	−2·094	−2·219	−9·165	142·933	64·09	285·35	+0·37
	7	355·407	2·091	2·204	8·600	142·775	134·08	317·18	·32
	12	355·514	2·088	2·188	7·959	142·541	204·12	349·06	·28
	17	355·654	2·086	2·173	7·245	142·235	274·21	21·00	·23
	22	355·826	2·085	2·157	6·462	141·861	344·34	52·98	·18
	27	356·028	2·085	2·142	5·615	141·423	54·50	84·99	·14
June	1	356·256	−2·085	−2·126	−4·711	140·928	124·69	117·03	+0·10
	6	356·507	2·085	2·110	3·758	140·384	194·90	149·09	·06
	11	356·777	2·085	2·094	2·765	139·801	265·11	181·15	·03
	16	357·061	2·086	2·078	1·743	139·188	335·32	213·20	·01
	21	357·354	2·086	2·062	−0·701	138·556	45·50	245·23	
	26	357·652	2·085	2·045	+0·350	137·915	115·65	277·24	
July	1	357·949	−2·084	−2·029	1·398	137·278	185·76	309·21	−0·01
	6	358·239	2·082	2·012	2·432	136·655	255·83	341·12	·03
	11	358·518	2·079	1·996	3·440	136·058	325·84	12·97	·05
	16	358·780	2·076	1·979	4·413	135·496	35·77	44·76	·08
	21	359·021	2·071	1·962	5·342	134·979	105·62	76·46	·12
	26	359·238	2·066	1·945	6·218	134·515	175·39	108·08	·17
	31	359·427	2·060	1·928	7·033	134·112	245·07	139·61	·22
Aug.	5	359·584	−2·053	−1·911	+7·782	133·775	314·65	171·04	−0·26
	10	359·708	2·045	1·893	8·460	133·510	24·13	202·38	·31